



MODEL SB1039F

14" X 40" LATHE 220V w/DRO

Manual Insert

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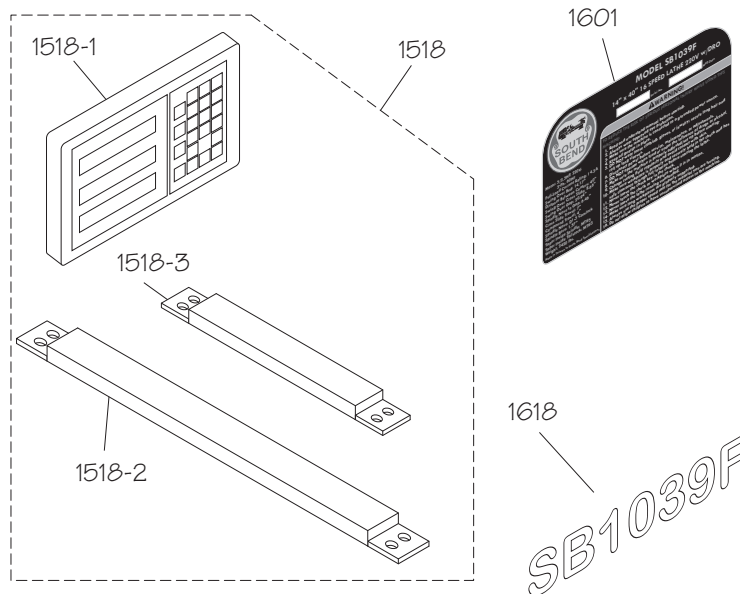
The Model SB1039F Lathe is the same machine as the Model SB1039 except for the following:

- Added a 2-Axis Fagor Digital Readout (DRO).

Except for the differences noted in this insert, all other content in the Model SB1039 Owner's Manual applies to this machine. Before operating your new lathe, you **MUST** read and understand this insert, the entire Model SB1039 Owner's Manual, and the Fagor DRO Owner's Manual to reduce the risk of injury when using this machine. Keep this insert for later reference.

If you have any further questions about this manual insert or the differences between the Model SB1039F and the Model SB1039, contact our Technical Support at (360) 734-1639 or email sales@southbendlathe.com.

New & Changed Parts



REF	PART #	DESCRIPTION
1518	PSB1039F1518	DRO ASSEMBLY FAGOR 2-AXIS
1518-1	PSB1014F2318-1	DRO DISPLAY FAGOR 20-IT
1518-2	PSB1037F2318-2	DRO X-AXIS SCALE FAGOR MKT-102

REF	PART #	DESCRIPTION
1518-3	PSB1039F1518-3	DRO Y-AXIS SCALE FAGOR MKT-22
1601	PSB1039F1601	MACHINE ID LABEL
1618	PSB1039F1618	MODEL NUMBER LABEL

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Model SB1039F

South Bend 14" x 40" 16 Speed Lathe 220V with DRO

Product Dimensions

Weight..... 2444 lbs.
 Width (side-to-side) x Depth (front-to-back) x Height..... 80-3/4 x 32-1/8 x 54-3/8 in.
 Footprint (Length x Width)..... 80-3/4 x 19-1/2 in.

Shipping Dimensions

Type..... Wood Slat Crate
 Content..... Machine
 Weight..... 2713 lbs.
 Length x Width x Height..... 90 x 40 x 69 in.

Electrical

Power Requirement..... 220V, 3-Phase, 60 Hz
 Full-Load Current Rating..... 14.3A
 Minimum Circuit Size..... 20A
 Switch..... Magnetic with Thermal Protection
 Switch Voltage..... 220V
 Plug Included..... No
 Recommended Plug/Outlet Type..... NEMA 15-20

Motors

Main

Type..... TEFC Induction
 Horsepower..... 5HP at 3450 RPM, 2.5 HP at 1725 RPM
 Voltage..... 220V
 Phase..... 3-Phase
 Amps..... 14A/10A
 Speed..... 3450/1720 RPM
 Cycle..... 60 Hz
 Number of Speeds..... Variable
 Power Transfer V-Belt & Gear
 Bearings..... Shielded and Permanently Sealed

Coolant

Type..... TEFC Induction
 Horsepower..... 1/8 HP
 Voltage..... 220V
 Phase..... 3-Phase
 Amps..... 0.3A
 Cycle..... 60 Hz
 Number of Speeds..... 1
 Power Transfer Direct Drive
 Bearings..... Shielded and Permanently Sealed

Main Specifications

Operation Info

Swing Over Bed.....	14.17 in.
Distance Between Centers.....	40 in.
Swing Over Cross Slide.....	8.66 in.
Swing Over Saddle.....	13.75 in.
Swing Over Gap.....	20.94 in.
Maximum Tool Bit Size.....	0.75 in.
Compound Travel.....	4 in.
Carriage Travel.....	36.5 in.
Cross Slide Travel.....	7 in.

Headstock Info

Spindle Bore.....	1.57 in.
Spindle Taper.....	MT#5
Number of Spindle Speeds.....	16
Spindle Speeds.....	50 – 2570 RPM
Spindle Type.....	D1-5 Camlock
Spindle Bearings.....	NTN Tapered Roller
Spindle Length.....	20.87 in.
Spindle Length with 3-Jaw Chuck.....	28.74 in.
Spindle Length with 4-Jaw Chuck.....	30.71 in.

Tailstock Info

Tailstock Quill Travel.....	4.5 in.
Tailstock Taper.....	MT#3
Tailstock Barrel Diameter.....	1.968 in.

Threading Info

Number of Longitudinal Feeds.....	17
Range of Longitudinal Feeds.....	0.002 – 0.067 in.
Number of Cross Feeds.....	17
Range of Cross Feeds.....	0.001 – 0.034 in.
Number of Inch Threads.....	45
Range of Inch Threads.....	2 – 72 TPI
Number of Metric Threads.....	39
Range of Metric Threads.....	0.2 – 14 mm
Number of Modular Pitches.....	18
Range of Modular Pitches.....	0.3 – 3.5 MP
Number of Diametral Pitches.....	21
Range of Diametral Pitches.....	8 – 44 DP

Dimensions

Bed Width.....	9 in.
Leadscrew Diameter.....	1-1/8 in.
Leadscrew TPI.....	4
Leadscrew Length.....	59 in.
Steady Rest Capacity.....	5/16 – 4-5/16 in.
Follow Rest Capacity.....	5/8 – 3-1/8 in.
Faceplate Size.....	12 in.
Feed Rod Diameter.....	3/4 in.
Floor to Center Height.....	42-5/8 in.
Height With Leveling Jacks.....	54-3/8 in.

Construction

Base.....	Cast Iron
Headstock.....	Cast Iron
Headstock Gears.....	Flame Hardened Steel
Bed.....	Induction Hardened and Ground Cast Iron
Stand.....	Cast Iron
Paint.....	Urethane

Other

Country Of Origin	Taiwan (Some Components Made in USA and Japan)
Warranty	1 Year
Serial Number Location	ID Label on Rear Side of Left Stand
Assembly Time	Approximately 1 Hour
Sound Rating	76 dB

Features

Allen Bradley Electrical Components
 Fagor DRO
 Meehanite Casting, Signature South Bend Three V-Way Bed
 Safety Chuck Guard with Micro-Switch Shut-Off
 Halogen Work Light (24V/70W)
 4-Way Tool Post
 Complete Coolant System
 Micrometer Carriage Stop
 Threading Dial Indicator
 NTN Japanese Spindle Bearing
 Full Length Splash Guard
 Front Removable Sliding Chip Tray
 Headstock Gears Run in an Oil Bath
 Completely Enclosed Universal Gearbox for Cutting Inch, Metric, Modular and Diametral Pitches
 Jog Button and Emergency Stop

Included Accessories

10 in. 4-Jaw Independent Chuck D1-5
 8 in. 3-Jaw Scroll Chuck (Mounted to 8 in. D1-5 Back Plate)
 12 in. Faceplate D1-5
 Follow Rest
 Steady Rest with Roller Bearing Tips
 #5 to #3 Morse Taper Spindle Sleeve
 Two Morse Taper #3 Dead Centers (1 Carbon Steel and 1 Carbide-Tipped)
 Six Leveling Pads
 Service Tools
 Tool Box
 USA Written Manual